What is claimed is:

1. A method for preparing a uniformly aligned zeolite supercrystal, which comprises growing a crystal of a zeolite or zeotype material in a uniformly aligned template, whereby said uniformly aligned zeolite supercrystal is prepared.

2. The method according to claim 1, wherein said template is a polymer film, a three-dimensional polymer mass, or a crystal of organic or organometallic compound.

3. The method according to claim 2, wherein said polymer film or 3-dimensional polymer mass as a template is a polymer capable of releasing an amine group under an acidic or alkaline condition.

4. The method according to claim 1, wherein said zeolite or zeotype material is selected from the group consisting of: (i) a zeolite or zeotype material having MFI framework; (ii) a zeolite or zeotype material having MEL framework; (iii) zeolites A, X, Y, L and beta, mordenite and ferrierite; and (iv) a mesoporous silica.

5. A method for preparing a uniformly aligned polymer film, which comprises the steps of:

(a) injecting a vapor of a first reactant into a reactor containing a substrate to form a covalent bond between a

functional group of said first reactant and a functional group on said substrate;

(b) injecting a vapor of a second reactant into said reactor to form a covalent bond between a functional group of said second reactant and a functional group of said first reactant covalently linked to said functional group on said substrate;

(c) when three or more reactants are used, injecting a vapor of a following reactant into said reactor to form a covalent bond between a functional group of said following reactant and a functional group of a previous reactant; and

(d) cycling the steps (a)-(c), wherein a functional group of said first reactant is covalently linked to a functional group of a final reactant.

6. A method for preparing a uniformly aligned three-dimensional polymer mass, which comprises the steps of:

(a) injecting a vapor of a first reactant into a reactor containing a substrate to form a covalent bond between a functional group of said first reactant and a functional group on said substrate;

(b) injecting a vapor of a second reactant into said reactor to form a covalent bond between a functional group of said second reactant and a functional group of said first reactant covalently linked to said functional group on said substrate;

(c) when three or more reactants are used, injecting a

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vapor of a following reactant into said reactor to form a covalent bond between a functional group of said following reactant and a functional group of a previous reactant;

(d) cycling the steps (a)-(c) to form a uniformly aligned polymer film, wherein a functional group of said first reactant is covalently linked to a functional group of a final reactant; and

(e) removing said substrate to produce said uniformly aligned polymer mass.

7. The method according to claim 5 or 6, wherein said substrate is selected from the group consisting of glass, quartz, mica, ITO (indium tin oxide) glass or electrode, silicon wafer, metal oxide, porous oxide, porous alumina and porous stainless steel.

8. The method according to claim 5 or 6, wherein said reactants have at least 2 functional groups.

9. The method according to claim 5 or 6, wherein said reactants have 2-8 functional groups.

10. The method according to claim 5 or 6, wherein said reactants have 2-4 functional groups.

11. The method according to claim 5 or 6, wherein said

reactants have difunctionality.

12. The method according to claim 8, wherein said reactants have homo- or hetero-functionality.

13. The method according to claim 8, wherein said reactant has a rigid molecular structure in the central moiety of its molecular structure.

14. The method according to claim 13, wherein said rigid molecular structure is an aromatic ring structure or a double bond.

15. The method according to claim 8, wherein at least one of said functional groups is placed at one end moiety of said reactant and at least one of said functional groups is placed at the other end moiety of said reactant.

16. The method according to claim 1, wherein said uniformly aligned template is prepared by the method of claim 5 or 6.

17. A zeolite supercrystal, characterized in that said zeolite supercrystal is uniformly aligned and channels in said zeolite supercrystal are uniformly aligned.

18. The zeolite supercrystal according to claim 14, wherein said zeolite supercrystal is prepared by the method of any one of claims 1-4.